## REMARKS

Claims 1-7 and 18-20 are all the claims pending in the application. Applicant has incorporated Claim 17 into independent Claim 1, and thus has canceled Claim 17 without prejudice or disclaimer. Accordingly, Applicant makes minor conforming changes to Claims 5 and 18. Applicant also amends Claim 4 consistent with the Specification.

Second, Applicant, again, respectfully traverses the decision to treat Applicant's election of species with traverse as "an election without traverse." Indeed, Applicant seeks the Examiner's re-consideration of this decision as discussed in the previous Amendment of September 20, 2006.

Finally, Claims 1-7 and 17-20 stand rejected on prior art grounds. Applicant respectfully traverses the prior art rejections based on the following discussion.

### I. The Prior Art Rejections

Claims 1-5 are rejected under 35 U.S.C. Section 102(e) as being anticipated by Tapphorn, et al. ("Tapphorn")(U.S. Patent No. 6,915,964). Claims 6 and 7 are rejected under 35 U.S.C. Section 103(a) as being unpatentable over Tapphorn as applied to claim 1 above, and further in view of Garvick, et al. ("Garvick")(U.S. Patent No. 6,173,650). Claims 1 and 17-20 are rejected under 35 U.S.C. Section 103(a) as being unpatentable over Baginski, et al. ("Baginski")(U.S. Patent No. 6,772,692) in view of Hee Cheul Choi, et al. ("Choi")(Positive and Negative Photopatterning of Metal Oxides on Silicon via Bipolar Electrochemical Deposition, Published on the Web, 9 August 2001)

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A. The Rejection Based on Tapphorn

Regarding claims 1-5, Tapphorn fails to disclose, teach or suggest the features of independent claim 1, and incorporated but amended claim 17, including the primary explosive layer includes an azide-based explosive salt with a predetermined thickness. (See Application, Page 4, lines 13-27; and Figures 1A-1C).

Indeed, the Office Action uses a different combination of references other than Tapphorn (see below) in an attempt to reject independent claim 1 in view of now incorporated claim 17. Accordingly, Tapphorn does not teach this combination. (See Office Action, Page 4, Section 6).

Further, please note, Applicant acknowledges the assertion in the Office Action that Tapphorn discloses that the metals deposited on the surface are aluminum, nickel, tungsten, which are all transitional metals and "ARE cations." (See Office Action, Page 2, lines 16-17).

Therefore, Tapphorn does not disclose, teach or suggest, the features of claim 1, including the primary explosive layer includes an azide-based explosive salt with a predetermined thickness as claimed by Applicant.

B. The Rejection Based on Tapphorn in view of Garvick

Regarding independent claim 1, and related dependent claims 6 and 7, to make up for the deficiencies of Tapphorn, the Examiner relies on Garvick. First, the references, separately or in combination, fail to disclose, teach or suggest a reason or motivation to be combined as previously indicated in the Non-Final Amendment of September 20, 2006.

Garvick also does not disclose or suggest the features of newly amended claim 1. Accordingly, Garvick is also deficient. (See above).

Based on the above, Applicant traverses the assertion that neither Tapphorn nor Garvick, alone or in combination, disclose or teach Applicant's invention of independent claim 1, which incorporates an amended claim 17, and related dependent claims 2-5.

For at least the reasons outlined above, Applicant submits that neither Tapphorn nor Garvick, alone or in combination, disclose, teach or suggest, including the primary explosive layer includes an azide-based explosive salt with a predetermined thickness as recited in independent claim 1.

C. The Rejection Based on Baginski in view of Choi

Regarding independent claim 1, which incorporates amended claim 17, and related dependent claims 18-20, the references, separately or in combination, fail to disclose, teach or suggest a reason or motivation to be combined.

Nothing within Baginksi, which pertains to an improved semiconductor bridge device for initiating a reaction with a relatively high output energy while reducing accidental firing with a reduced sensitivity, suggests a general white light promoted electrochemical metal oxide photopatterning procedure on silicon to produce transparent and semi-transparent thin films for technological devices involving spatial definition as disclosed in Choi. Thus, Baginski teaches away from being combined with another invention, such as, Choi. (See Baginski at Abstract; Column 1, lines 15-67; and Choi at Abstract; Paragraph 1, lines 1-14).

Please note, in part, Baginski requires formation of a single, relatively uniform laminate layer of a composite overcoat 114 (including 125), whereas Choi (as indicated below) teaches formation of a photopatterned layer, which incompletely covers a lower silicon substrate. Thus, these technologies are structurally and functionally distinct. (See Baginksi, Column 3, lines 60-67; and column 4, lines 49-67).

Therefore, one of ordinary skill in the art of electro-explosive devices would not have combined these references absent hindsight, particularly with the art of transparent thin film technology for electronic applications, such as, ultrafast color displays.

Second, even assuming that the references would have been combined, Baginski, as indicated above, does not disclose, teach or suggest the features of independent claim 1, and related dependent claims 18-20, including the primary explosive layer includes an azide-based explosive salt with a predetermined thickness. (See above).

Indeed, Applicant agrees with the Office Action that Baginski does not disclose or teach the features of claim 1, including depositing a metal layer in situ on the substrate layer. Accordingly, please note, Baginski also does not disclose or teach another feature of claim 1, including a primary explosive layer includes an azide-based explosive salt with a predetermined thickness. Applicant respectfully submits that contrary to the assertion in the Office Action that Baginski specifically discloses an explosive layer of nickel azide, the Office Action does not provide a citation for this assertion as required by the MPEP, and further the Applicant is unable to locate such a specific disclosure in the Baginski reference. (See Office Action, Section 6, Page 4, line 7-Page 5, line 4).

Choi is also deficient.

Instead, Figures 1-3 and Table 1 of Choi merely disclose, as discussed above, a general white light promoted electrochemical metal oxide photopatterning procedure on n-or p-type Si, which permits negative and positive masking. In particular, a process 4P provides for bipolar electrochemical deposition performed where a short anodic current is applied to a silicon surface while light is illuminated through a masking to produce deposition of metal oxide in the desired patterning. Contrary to the assertion in the Office Action, the process 4P as well as the conventional 2P process, and the 2 and 4 non-photopatterning deposition of metal oxides on silicon processes all involve in-situ heating at 60 degrees Celsius during metal oxide deposition (what the Examiner attempts to analogize to Applicant's step of depositing a metal layer of metal in situ on the substrate layer). Accordingly, Choi is more structurally and functionally equivalent to photopatterning a layer of metal oxide on select locations of a silicon substrate, which appears to occur while being heated in-situ at 60 degrees Celsius, not in-situ deposition of a metal layer on a substrate layer, which occurs after formation of a substrate layer but prior to reacting the metal layer as claimed by Applicant. Therefore, Choi does not disclose or suggest depositing a metal layer of a metal in situ on a substrate layer. (See Office Action, Section 6, Page 5, lines 4-6; Choi at Abstract; Page 1, Paragraph 1, lines 10-14; Page 2, Paragraph 2, lines 1-14; Table 1; Page 3, Paragraph 3, line 1-Paragraph 4, line 10; and Figures 1-3).

To be sure, and as discussed in the previous Amendment of September 20, 2006, Applicant discloses a method of making a thin film explosive detonator, which includes, in part, depositing a metal layer of a metal in situ on a substrate layer, and reacting the metal layer to form an azide based primary explosive layer as claimed. As mentioned,

Choi is focused on transparent thin film formation using in-situ heating of metal oxides not azide based explosive layer formation using in-situ deposition of metal on a substrate layer, such as, silicon. Therefore, Choi certainly does not disclose, teach or suggest, including the primary explosive layer includes an azide-based explosive salt with a predetermined thickness as claimed by Applicant. (See above).

For at least the reasons outlined above, Applicant submits that neither Baginski nor Choi, alone or in combination, disclose, teach or suggest, including the primary explosive layer includes an azide-based explosive salt with a predetermined thickness as recited in independent claim 1.

For the reasons stated above, the claimed invention, and the invention as cited in independent claim 1, and related dependent claims 18-20, is fully patentable over the cited references.

**II. Formal Matters and Conclusions**

In view of the foregoing, Applicants submit that claims 1- 7 and 18-20, all the claims presently pending in the application, are patentably distinct from the prior art of record and are in condition for allowance. The Examiner is respectfully requested to pass the above application to issue at the earliest possible time.

Should the Examiner find the application to be other than in condition for allowance, the Examiner is requested to contact the undersigned at the local telephone number listed below to discuss any other changes deemed necessary.

Please charge any deficiencies and credit any overpayment to Attorney's Deposit Account Number 50-1114.

Respectfully submitted,

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